

**REMARKS**

Claims 1 – 4, 9 – 14, 16 – 19 and 21 - 32 are pending in the present application. Claims 5 – 8, 15 and 20 were previously canceled.

On page 2 of the Office Action, claims 1, 2, 4, 9, 10, 12 – 14, 16 – 19, 21 – 26 and 28 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,724,577 to Exley et al. (hereinafter "the Exley et al. patent") in view of U.S. Patent Application Publication No. 2002/0120598 by Shadmon et al. (hereinafter "the Shadmon et al. publication"). The application contains six independent claims, namely claims 1, 9, 16, 30, 31 and 32. Applicant is (a) clarifying an aspect of claims 1, 9 and 16 that is neither disclosed nor suggested by the cited combination of the Exley et al. patent and the Shadmon et al. publication, and (b) traversing the rejection of claims 30, 31 and 32.

Claim 1 provides for a system that includes, *inter alia*, a module that provides a key that includes (1) a unique identifier of a datum, and (2) an additional attribute of said datum other than its content.

The Exley et al. patent discloses a key that is a unique identifier of a data element in a hierarchical outline (col. 2, lines 10 – 11). The Exley et al. patent also discloses a relational data base table that includes a column for storing the key, and additional columns for storing additional attributes (col. 2, lines 25 – 27). The Exley et al. patent, with reference to FIG. 3, explains that key establishes a linkage between the hierarchical data base and the relational data base table (col. 3, lines 31 – 34). More specifically, to view relational data for a heading element in the hierarchical outline, a system uses the key as an index, searches the relational data base table, and displays the relational data, i.e., data from the attribute columns, for that heading (col. 4, lines 1 – 5). Thus, the purpose of the key is to enable the system to access the attributes in the relational data base table.

The Office Action, on page 3, recognizes that the Exley et al. patent does not explicitly teach a key that also includes an additional attribute, and so, introduces the Shadmon et al. publication. The Office Action then asserts that it would be obvious to combine the teachings of the Exley et al. patent and the Shadmon et al. publication to facilitate efficient search and browsing to end users. Applicant respectfully disagrees with this assertion.

In the Exley et al. patent, including the attributes in the key does not enhance the system's ability to access the attributes in the relational data base table. Since the purpose of the key in the Exley et al. patent is to enable the system to access the attributes in the relational data base table, there is **no apparent motive to include the attributes in the key**. Moreover, if the key were modified to include the attributes therein, rather than in the relational data base table, the system in the Exley et al. patent would not need for the key to provide a linkage to the attributes in the relational data base table, as is described in the Exley et al. patent. Therefore, such a modification would arguably **change the principle of operation** of the system of the Exley et al. patent. Accordingly, the Exley et al. patent **cannot serve as a basis for a section 103(a) rejection** of claim 1.

Nevertheless, the Office Action suggests that the Shadmon et al. publication discloses a key in which an additional attribute is encoded into a unique identifier, and that such a key could be employed by the system in the Exley et al. patent.

In the Shadmon et al. publication, a key is constructed by encoding data from a record into strings (par. 0202), and concatenating the strings to form a concatenated key (para. 0210). For example, with reference to FIG. 11, the Shadmon et al. publication describes a key configured as "A00+B002+FABC Corp.+", which represents names taken from a document shown in FIG. 1 (par. 0216). Thus, in the Shadmon et al. publication, the attributes in the key are representations of the content of the data record to which the key relates. Consequently, the Shadmon et al. publication does not disclose or suggest a key that includes (1) a unique identifier of a datum, and (2) an additional attribute of said datum **other than its content**, as recited in claim 1.

For the several reasons provided above, Applicant submits that claim 1 is patentable over the cited combination of the Exley et al. patent and the Shadmon et al. publication.

Independent claims 9 and 16 each includes recitals similar to those of claim 1, as described above. Thus, claims 9 and 16, for reasoning similar to that provided in support of claim 1, are also patentable over the cited combination of the Exley et al. patent and the Shadmon et al. publication.

Claims 2, 4 and 21 - 25 depend from claim 1. Claims 10, 12 – 14 and 26 depend from claim 9. Claims 17 – 19, 28 and 29 depend from claim 16. By virtue of these dependencies, claims 2, 4, 10, 12 – 14, 17 – 19, 21 – 26, 28 and 29 are also patentable over the cited combination of the Exley et al. patent and the Shadmon et al. publication.

Claim 30 provides for a system. The system includes a module that searches an index of data that includes a first datum associated with a first key that includes an additional attribute having a first value, and a second datum associated with a second key that includes an additional attribute having a second value. The system also includes a module that sorts a list in an order determined by the first value (of the additional attribute in the first key) and the second value (of the additional attribute in the second key).

The Office Action, on page 5, suggests that the Exley et al. patent discloses a sorting order determined by index keys. However, as mentioned above, the Office Action recognizes that the Exley et al. patent does not explicitly teach that a key includes an additional attribute. Consequently, since the key does not include an attribute, the Exley et al. patent does not disclose that a sorting order is determined by values of attributes in the key. Therefore, Applicant submits that the cited combination of the Exley et al. patent and the Shadmon et al. publication neither disclose nor suggest a module that sorts a list in **an order determined by the first value (of the additional attribute in the first key) and the second value (of the additional attribute in the second key)**, as recited in claim 30.

Claims 31 and 32 include recitals similar to those of claim 30, as described above. Therefore, claims 31 and 32, for reasoning similar to that provided in support of claim 30, are also patentable over the cited combination of the Exley et al. patent and the Shadmon et al. publication.

Applicant respectfully requests reconsideration and withdrawal of the section 103(a) rejection of claims 1, 2, 4, 9, 10, 12 – 14, 16 – 19, 21 – 26 and 28 – 32.

On page 6 of the Office Action, claims 3, 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Exley et al. patent and the Shadmon et al. publication, in view of U.S. Patent Application Publication No. 2002/0016922 by Richards et al. (hereinafter "the Richards et al. publication").

Claim 3 depends from claim 1. Claim 11 depends from claim 9. Claim 17 depends from claim 16. Above, Applicant explained that claims 1, 9 and 16 are patentable over the cited combination of the Exley et al. patent and the Shadmon et al. publication. Applicant submits that the Richards et al. publication does not make up for the deficiencies of the Exley et al. patent and the Shadmon et al. publication, as the Exley et al. patent and the Shadmon et al. publication relate to claims 1, 9 and 16. Accordingly, Applicant further submits that claims 1, 9 and 16, and claims 3, 11 and 17, by virtue of their dependencies, are all patentable over the cited combination of the Exley et al. patent, and the Shadmon et al. and Richards et al. publications.

Applicant respectfully requests reconsideration and withdrawal of the section 103(a) rejection of claims 3, 11 and 27.

As mentioned above, Applicant is clarifying an aspect of claims 1, 9 and 16 that is neither disclosed nor suggested by the cited combination of the Exley et al. patent and the Shadmon et al. publication. The amendment to claims 1, 9 and 16 is not intended to narrow the scope of any term of any claim. Therefore, the doctrine of equivalents should be available for all of the terms of all of the claims.

In view of the foregoing, Applicant respectfully submits that all claims presented in this application patentably distinguish over the prior art. Accordingly, Applicant respectfully requests favorable consideration and that this application be passed to allowance.

Respectfully submitted,



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